Guidance Document
And
Application Instructions

FFY 2004 Section 319(h) Nonpoint Source Implementation Grant

Natural Resources and Environmental Protection Cabinet

Department for Environmental Protection
Division of Water, Nonpoint Source Section
14 Reilly Road
Frankfort, Kentucky 40601
(502) 564-3410

Applications must be postmarked
(or received if hand delivered)
by Friday, February 14, 2003

October 2002

FFY 2004 Section 319(h) Grant
Project Application Schedule

Date	Activity
February 14, 2003	Project application submission deadline
February 20 - April 30, 2003	Project application review, ranking, and selection
July 31, 2003	Grant application mailed to EPA

The Guidance Document and Application Instructions can be found on the Web at:

http://water.nr.state.ky.us/dow/npsguide.htm

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INTRODUCTION

WHAT IS NONPOINT SOURCE POLLUTION?

Unlike point source pollution, which enters waterways at definite locations (such as discharge pipes from wastewater treatment plants), nonpoint source (NPS) pollution originates from numerous sources. Nonpoint source pollution, also known as runoff pollution, accounts for approximately two-thirds of the water quality impairments in Kentucky's streams and lakes and is the number one contributor to water pollution in the Commonwealth.

Nonpoint source pollutants, such as pesticides, fertilizers, nutrients, metals, sediment, bacteria, and other pathogens resulting from various land-use activities, are picked up by draining rainwater and carried into Kentucky's streams, groundwater, rivers, and lakes. NPS pollutants can affect the safety of our drinking water, make waters unsafe for recreational activities, and destroy our natural aquatic ecosystems. A list of activities that cause nonpoint source pollution can be found in the box on the next page.

HOW CAN NONPOINT SOURCE POLLUTION BE CONTROLLED?

Nonpoint source pollution is controlled primarily through the adoption of practical and cost-effective land management practices known as **best management practices (BMPs)**. BMPs allow for the continuation of everyday activities while reducing or preventing nonpoint source pollution. Using BMPs allows for the preservation of water quality while maintaining the economic value of Kentucky's land resources.

Effective control of runoff pollution requires both statewide and watershed projects. Watershed projects are especially important; they are designed to improve or maintain water quality conditions in NPS priority watersheds through aggressive BMP implementation. They address diverse NPS concerns, often utilize other BMP funding sources, and monitor water quality conditions as their measure of project success.

Kentucky receives funding from the U.S. Environmental Protection Agency (EPA) for priority watershed and statewide nonpoint source pollution control projects. Section 319(h) grants can provide up to 60 percent of project costs; a minimum 40-percent non-federal match is required. Projects should incorporate an appropriate combination of the following programs or activities:

- **Educational Activities:** Raise the level of public awareness about watersheds, how nonpoint source pollution affects water quality, and BMPs that are available to control it. Education activities are an essential part of most nonpoint source projects.
- **Technical Assistance:** Provide land users with sound information on both structural and non-structural BMPs (including installation and maintenance requirements).
- **Financial Assistance:** Provide financial incentives that encourage people to install BMPs or change land-management practices.

Nonpoint Source Categories

AGRICULTURE
Nonirrigated Crop Production
Irrigated Crop Production
Specialty Crop Production
Pasture Grazing-Riparian and/
or Upland Pasture Grazing-Riparian
Pasture Grazing-Upland
Range Grazing-Riparian and/
or Upland Range Grazing-Riparian
Range Grazing-Upland
Animal Feeding Operations (NPS)
Aquaculture
Animal Holding/Management Areas

SILVICULTURE
Harvesting, Restoration, Residue Management
Forest Management (pumped drainage, fertilization, and pesticide application)
Logging Road Construction/Maintenance
Silvicultural Point Sources

CONSTRUCTION
Highway/Road/Bridge Construction
Land Development

URBAN RUNOFF/STORM SEWERS
Non-industrial Permitted
Industrial Permitted
Other Urban Runoff
Illicit Connections/Illegal Hook-ups/Dry Weather Flows
Highway/Road/Bridge Runoff
Erosion and Sedimentation

RESOURCE EXTRACTION
Surface Mining
Subsurface Mining
Placer Mining
Dredge Mining
Petroleum Activities
Mill Tailings
Mine Tailings
Acid Mine Drainage
Abandoned Mining
Inactive Mining

IMPROPER WASTE DISPOSAL
Sludge
Wastewater
Landfills
Inappropriate Waste Disposal/Wildcat Dumping
Industrial Land Treatment
Onsite Wastewater Systems (Septic Tanks)
Hazardous Waste
Septage Disposal

HYDROMODIFICATION
Channelization
Dredging
Dam Construction
Upstream Impoundment
Flow Regulation/Modification

HABITAT MODIFICATION (other than hydro-modification)
Removal of Riparian Vegetation
Streambank Modification/Destabilization
Drainage/Filling of Wetlands

MARINAS AND RECREATIONAL BOATING
In-water Releases
On-land Releases

EROSION FROM DERELICT LAND

ATMOSPHERIC DEPOSITION

WASTE STORAGE/STORAGE TANK LEAKS
(Above ground)
(Underground)

HIGHWAY MAINTENANCE AND RUNOFF SPILLS

CONTAMINATED SEDIMENTS

DEBRIS AND BOTTOM DEPOSITS

INTERNAL NUTRIENT CYCLING (primarily lakes)

SEDIMENT RESUSPENSION

NATURAL SOURCES

RECREATIONAL AND TOURISM ACTIVITIES
(Non-boating)
Golf Courses

UPSTREAM IMPOUNDMENT

SALT STORAGE SITES

GROUNDWATER LOADINGS

GROUNDWATER WITHDRAWAL

OTHER
Source Unknown

From KDOW (2002b)

- **Monitoring:** Provide in-stream water quality monitoring to demonstrate project effectiveness.
- **Training:** Provide training on rapidly developing NPS control strategies and technologies for both professional and volunteer staff involved with implementing nonpoint source projects and programs.
- **BMP Implementation:** Provide land users opportunities to learn about BMPs and their proper use first hand by installing them as a watershed demonstration or a technology demonstration.
- **Enforcement:** Increase resources to implement and enforce existing laws and regulations as well as implement new state or local regulatory programs.

Direction From EPA

The U.S. Environmental Protection Agency has direct oversight of this program. EPA guides states in developing and implementing their NPS programs. Kentucky receives approval from EPA and reports on the progress of implementing the Kentucky Nonpoint Source Pollution Control Program.

EPA's long-term vision is to have all states "implementing dynamic and effective nonpoint source programs designed to achieve and maintain beneficial uses of water."

EPA evaluates the program's success in achieving and maintaining beneficial uses of water by assessing our progress in meeting the "nine key elements." Kentucky strives to meet EPA's national vision by funding projects that will provide for an effective overall NPS program and help to meet the nine key elements.

Direction From The State

The purpose of Section 319(h) grants is to provide financial assistance for implementing the state's NPS Management Program. The objectives of Kentucky's Nonpoint Source Pollution Control Program are presented in the *Kentucky Nonpoint Source Management Program - 2.0 for Federal Fiscal Years 2000-2005* (KDOW 2000). The document describes existing and proposed programs to control and abate nonpoint source pollution in Kentucky.

Focus Areas

In an effort to reduce, remediate, and prevent nonpoint source pollution, the Kentucky Division of Water, Nonpoint Source Section, has identified several high priority needs or focus areas. These priorities are based on:

1. National Clean Water Act, Section 319(h) guidance.
2. Suggestions from Kentucky agencies
3. Suggestions from organizations.
4. Identified nonpoint source impacts in Kentucky.
5. Current guidance from EPA.

Watershed restoration projects are the primary focus areas for the FFY 2004 Grant. Up to $5 million in federal financial assistance is available. This is a unique opportunity to put substantial resources into watershed remediation projects.

1. High Priority Watershed Restoration Projects

Substantial funding (approximately $3.5 million) is available to implement watershed restoration projects in TMDL and 1st Priority 303(d) watersheds (KDOW 2002b). These watershed demonstration projects must be

NINE KEY ELEMENTS OF AN EFFECTIVE STATE NONPOINT SOURCE PROGRAM

1. "Explicit short- and long-term goals, objectives and strategies for **protecting surface and ground water**."
2. "**Strong working partnerships** and collaboration with appropriate state, interstate, tribal, regional and local entities (including conservation districts), private sector groups, and citizens groups and federal agencies."
3. "A balanced approach that emphasizes both **state-wide** nonpoint source programs and on-the-ground management of **individual watersheds** where waters are impaired or threatened."
4. "The State program **abates known water quality impairments** resulting from nonpoint source pollution and **prevents significant threats** to water quality from present and future activities."
5. "An identification of waters and watersheds impaired or threatened by nonpoint source pollution and a process to progressively address these waters."
6. "The state reviews, upgrades and implements all program components required by Section 319 of the Clean Water Act and establishes flexible, targeted, iterative approaches to achieve and maintain beneficial uses of water as expeditiously as practicable."
7. "An identification of federal lands and objectives which are not managed consistently with state program objectives."
8. "Efficient and effective management and implementation of the state's nonpoint source program, including necessary financial management."
9. "A feedback loop whereby the state reviews, evaluates and revises its nonpoint assessment and its management program at least every five years."

results-oriented with goals and objectives focused on reducing nonpoint source pollution, improving water quality and meeting water quality standards. Environmental data collection to determine the project's success in reducing nonpoint source pollution is required.

2. Other Watershed Restoration or Protection Projects

Limited funding (approximately $750,000) is available to implement (1) watershed restoration projects in non-TMDL or 1st Priority 303(d) watersheds and (2) watershed protection projects. Refer to the Section entitled "Eleven Criteria for Successful Nonpoint Source Project" for additional information on priority NPS watersheds in need of restoration and protection.

3. Development of Watershed Implementation Plans

Limited funding (approximately $750,000) is available to develop Watershed Implementation Plans (WIPs) in TMDL and 1st Priority 303(d) watersheds (KDOW 2002c). In an effort to promote holistic approaches to addressing water quality problems, EPA is allowing and encouraging the development of watershed-based plans in TMDL and 1st Priority 303(d) watersheds. WIPs should include approaches that will address all of the sources and causes of

impairments and threats to the watershed. WIPs must contain the elements identified in Section II of the *Supplemental Guidelines for the Award of Section 319 Nonpoint source Grants to States and Territories in FY 2003* (USEPA 2002). This EPA document may be accessed on the Web at: http://www.epa.gov/owow/nps/Section319/319guide03.htm. Project applications that upgrade existing plans to include the EPA required elements are encouraged. WIP applications are not required to include an implementation component; the final product is the WIP document.

If you are interested in developing a project to meet these needs, please contact the Division of Water, NPS Section as soon as possible. NPS Section staff will help to ensure project eligibility and will help to avoid duplication of efforts that are already underway in these watersheds.

Applying For Section 319(h) Funding: Overview

Applicants must submit the application (and QAPP if required) in two ways:

1. Three print copies (double-sided, copied on recycled paper) and
2. One electronic copy (on 3.5" diskette) saved as Microsoft Word version 97 (or earlier) file.

Applications must be postmarked (or received if hand delivered) no later than **Friday, February 14, 2003.** Any applications submitted after February 14, 2003, will **not** be considered for funding under the FFY 2004 Section 319(h) NPS Implementation grant.

Send Completed Applications to:

ATTN: 2004 NPS Application
Division of Water
Nonpoint Source Section
14 Reilly Road
Frankfort, KY 40601

Faxes or emails will not be accepted.

Step 1: The Project Application

The first step toward acquiring Section 319(h) funding is to prepare and submit the project application. **Any application that is determined to be deficient, not eligible, or missing KEY components will not be considered for funding.** It is important for the application to convey a clear understanding of what you are applying for.

The application must be postmarked (or received, if hand delivered) no later than **Friday, February 14, 2002**. Any submissions after this date will not be considered for funding under the FFY 2004 Section 319(h) grant. All applicants will be notified whether their project is being considered for funding within three weeks after the application has been received.

Step 2: Project Application Ranking And Selection

After an eligible and complete project application is submitted on time, it will then undergo the process of ranking and selection.

Because Section 319(h) funding is limited in Kentucky, it is very unlikely that all project applications will receive funding. Therefore, project applications compete against each other for these funds through a ranking process.

As in past years, members of the Kentucky Nonpoint Source Advisory Committee and members of the Kentucky Water Interagency Coordinating Committee (KWICC) will be invited to rank project applications. EPA also participates in reviewing and ranking the applications.

All project applications will be ranked based on the 11 criteria for a successful project. Evaluators will assign a numerical score to each of the evaluation criteria. The scores will be weighted according to the relative importance of each criterion to the success of the project. The 11 criteria are listed in order of importance (see page 11), with #1 being the most important. The scores will then be combined to derive an overall evaluation score for the project application. This score will be the basis for ranking and selecting the project applications to receive Section 319(h) funding. After evaluation and ranking is

complete, we will notify you about your application's ranking and whether it has been selected for funding.

Duplicate projects will not be funded. For example, if multiple applications for educational programs to reduce extensive pavement and other impervious surfaces are received, only the highest ranked project will be funded.

STEP 3: FUNDING

The selected project applications will be included in the FFY 2004 Section 319(h) Nonpoint Source Implementation Grant application. EPA will then review and approve the application, and after Congress appropriates the funds, Kentucky will receive the requested grant award.

Once EPA awards the Section 319(h) funds to Kentucky, they need to be made available to you. This is done through one of two legal contracts, either a Memorandum of Agreement (MOA) or a Grant Agreement (GA), depending on whether your organization is governmental in nature. If this is the first 319(h) project you have worked with, we suggest you contact us to obtain a sample MOA or GA to review.

EPA frequently adds special conditions and requirements to Section 319(h) grants. When Kentucky accepts the grant award, it is understood that these special grant conditions are also accepted and that they will be met. Those that apply to your project will be "passed on" to you in the MOA or GA. While it is likely that the FFY 2004 grant conditions and requirements will be nearly the same as those for 2002, we cannot be certain until the award notification is received.

No project activities can begin until an MOA or GA has been developed and fully executed.

NONPOINT SOURCE POLLUTION CONTROL PROGRAM

CONTACTS

NREPC.DEPDOWNPS@mail.state.ky.us

Kentucky Division of Water
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Nonpoint Source Section

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- Responsible for the oversight and development of projects to collect and assess fluvial geomorphic data.
- Provides technical assistance, technology exchange, and project oversight on issues involving hydromodification (stream restoration), habitat modification, siliviculture, construction, urban runoff, and recreation.

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663 Teton Trail
Frankfort, KY 40601
502/564-3080
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Shelly Graves
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- Coordinates with DOW, DOC staff and contractors for the overall administration of 319(h) funds for Agriculture and Construction.
- Responsible for the administration of "even" year grants and CWAP.

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FFY 2004 Section 319(h) Grant Project Application Schedule

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DESIGNING AN EFFECTIVE AND COMPETITIVE NONPOINT SOURCE POLLUTION CONTROL PROJECT

ACTIVITIES NOT ELIGIBLE NOR ALLOWABLE FOR SECTION 319(h) FUNDING

A clear understanding of what activities are eligible and allowable for Section 319(h) funding is necessary before beginning to plan a project. Not all conceivable nonpoint source pollution control activities are eligible or allowable under Section 319(h). Therefore, it is important to contact the Division of Water (DOW), Nonpoint Source Section, to discuss your project ideas and to identify eligible project activities. The following activities are **neither eligible nor allowable** for Section 319(h) funding:

- Activities to control pollution from **point source discharges**, which are subject to Kentucky Pollutant Discharge Elimination System (KPDES) permitting requirements, are ineligible for Section 319(h) funding. These include sewage treatment plants, industrial facilities, mining operations, Concentrated Animal Feeding Operations (CAFOs), construction sites greater than five acres, sawmill sites, urban Phase I and Phase II areas and other types of stormwater discharges. (**Note**: construction sites greater than one acre will have to be permitted starting March 2004)
- Section 319(h) grant funds cannot be used for general **cost-share** programs to implement BMPs. However, Section 319(h) funds may be used to install BMPs as either (1) a BMP Technology Demonstration Project (a technology-specific demonstration) or (2) a Watershed Demonstration Project (a results-based demonstration).
- Section 319(h) funds cannot be used for **research**. While BMP research is needed in Kentucky (and the nation), funding from other sources must be tapped and utilized to pursue these activities.
- Do not sell products produced or make loans with Section 319(h) funds, as the project will become entangled in an infinite cash-flow loop, which cannot be fiscally closed out with EPA.
- Section 319(h) funds cannot be used for developing or purchasing promotional paraphernalia (e.g., T-shirts, bumper stickers, mugs, etc.).

ELEVEN CRITERIA FOR A SUCCESSFUL NONPOINT SOURCE PROJECT

The following 11 criteria have been developed to guide Section 319(h) projects for Kentucky. **These criteria are used to evaluate and select projects to receive Section 319(h) grant funding.** Criteria are listed in the order of importance, with #1 being the most important.

1. The project contributes to the implementation of the *Kentucky Nonpoint Source Management Program* to protect surface water or groundwater.

Implementing a balanced nonpoint source pollution control program is important in

order to reduce nonpoint source pollution and to meet the evaluation criteria set forth by EPA, which call for "a balanced approach between individual watersheds and statewide nonpoint source programs." Because several of EPA's evaluation criteria also focus on attaining water quality standards and preventing degradation from both present and future sources of nonpoint source pollution, it is important that Kentucky's Section 319(h)-funded projects address both statewide and watershed projects.

The Kentucky Nonpoint Source Pollution Control Program also strives to achieve other balances. One type is programmatic balance. Projects that will provide the best, most effective solutions to local nonpoint source pollution problems are sought for funding. Neither EPA nor the Division of Water prescribes the specific solutions for controlling and abating nonpoint source pollution. Rather, the programs that are the most effective are those driven by local needs: education, professional training, technical assistance, financial incentives, technology transfer, enforcement or watershed demonstration projects.

Balance among nonpoint source categories, such as agriculture, construction and resource extraction, is also a goal. For example, land disposal, urban runoff, agriculture and resource extraction (mining, oil and gas, etc.) are the primary sources of pollution of surface waters in Kentucky (KDOW 2002b). Therefore, in order to achieve categorical balance, the Kentucky Nonpoint Source Pollution Control Program strives to provide funding to address these impacts.

2. The project has NPS priority watershed status, or data documenting the NPS impact or threat, and targets pollution control activities to address the identified priority pollutants.

Funding priority is given to projects that address identified nonpoint source problems or threats in **NPS priority watersheds**. NPS priority watersheds include groundwater, wetlands, rivers, streams and lakes impacted by nonpoint source pollution. They also include high quality waters threatened by NPS pollution because of changing land uses. The Nonpoint Source Pollution Control Program seeks to (1) **restore watersheds** that have been altered or degraded and (2) **protect watersheds** from future impacts.

Projects that focus activities on fixing *identified* problems in watersheds with *approved* Total Maximum Daily Loads (TMDLs) will receive more points during project evaluation than projects in watersheds with a TMDL that is under development. Similarly, projects in 303(d) 1st priority impaired watersheds will receive more points than those in 303(d) 2nd priority impaired watersheds.

Funding priority is provided to projects and programs that focus on NPS pollution control activities that address *priority* pollutants of concern in these watersheds. For example, if a watershed is identified as being impacted by sediment, projects which focus on erosion control and reducing sediment in that watershed will receive priority ranking. **Reasonable assurances must be provided that the project will help reduce the NPS pollution problems in the watershed.**

Most of the Division of Water's water quality data pertains to streams, rivers and lakes. However, groundwater and wetlands are given equal consideration as important water resources that the Kentucky Nonpoint Source Pollution Control Program must protect or remediate. Nonpoint source watershed projects should strive to address all affected water resources in a holistic approach.

Only a fraction of the water resources in Kentucky have been monitored. Local citizens, agencies or other organizations may be aware of other nonpoint source pollution problems that have not been reported to, or discovered by, the Division of Water. If an unidentified nonpoint source priority watershed exists in your area, contact the Nonpoint Source Section as soon as possible. The Division relies on outside input to expand its existing water-quality database. However, to maximize the data's usefulness, it must be based on scientific methods and procedures.

With limited Section 319(h) grant funds available for controlling nonpoint source pollution in Kentucky, it is imperative that resources be targeted to priority pollutants in priority watersheds, whether impacted or threatened.

In addition to remediating existing problems, the Kentucky Nonpoint Source Pollution Control Program strives to prevent nonpoint source pollution from occurring. The Division of Water is equally interested in preventing degradation of Kentucky's High Quality Waters by NPS pollution.

The list of High Quality Waters includes Outstanding National Resource Waters, Reference Reach Streams, Kentucky Wild Rivers and some Kentucky Outstanding Resource Waters. Specific information on these streams and these classification systems is available at http://water.nr.state.ky.us/wq/Special_waters/SpecialWaters.htm. If the water quality in one of these watersheds is truly threatened, and supporting information/documentation is presented in the application, then the project will receive high priority watershed criteria points.

Refer to the flow chart on page 14 to determine the relative importance of Kentucky's Nonpoint Source Priority Watersheds.

3. The project objectives and activities will reduce nonpoint source pollution.

Projects that will significantly reduce NPS pollution and likely result in attaining water quality standards will receive the highest points.

4. The project integrates NPS objectives for the Kentucky Watershed Approach Framework.

Projects that promote action plan implementation in the Salt/Licking River Basin Management Unit will receive bonus points during ranking. (See schedule page 15.)

Nonpoint Source Priority Watersheds

The NPS Program is responsible for protecting Kentucky's surface and groundwater and restoring impacted waters. The following flow chart is provided to help applicants determine the relative priority of their projects and the competitive points that will be awarded. If you are in doubt as to whether or not a watershed is impacted or threatened by point or nonpoint pollution, contact the Division of Water Nonpoint Source Section.

NPS Priority Watersheds
(In order of decreasing priority)

Watersheds Requiring PROTECTION

High Quality and Outstanding Resource Waters
with demonstrable threats
(Refer to: http://water.nr.state.ky.us/wq/special_waters/specialwaters.htm)

Waters that meet designated uses
with demonstrable threats
(Refer to: http://water.nr.state.ky.us/dow/pubs/2002_305b.pdf) (KDOW 2002a)

Watersheds Requiring RESTORATION
(In order of descending priority)

Approved TMDLs
(Refer to: http://water.nr.state.ky.us/dow/303(d)2002.htm)

TMDLs Under Development
(Refer to: http://water.nr.state.ky.us/dow/303(d)2002.htm)

303(d) First Priority Listed Streams
(Refer to: http://water.nr.state.ky.us/dow/303(d)2002.htm)

303(d) Second Priority Listed Streams
(Refer to: http://water.nr.state.ky.us/dow/303(d)2002.htm)

305(b) Listed Streams not on 2002 303(d) Report
(Refer to: http://water.nr.state.ky.us/dow/pubs/2002_305b.pdf) (KDOW 2002a)

Unassessed streams with data indicating an impairment
(Submit data with application)

* At the time this guidance document was being prepared, the "2002 303(d) List of Water For Kentucky" (2002 – 203(d) Report) was in draft form. Due to substantial changes, neither the 1998 303(d) list nor the March 1999 "Kentucky Nonpoint Source Assessment Report" should be used to determine the impairment status of waterbodies. For this application process, use the 2002 – 303(d) Report at the referenced web address. DOW staff will check application information against the Final 2002 – 303(d) Report to ensure accuracy of priority watershed information.

BONUS POINTS SCHEDULE for ACTION PLAN IMPLEMENTATION

Grant Year	River Basin Management Unit
FFY 2003	1) Kentucky
FFY 2004	2) Salt / Licking
FFY 2005	3) Tennessee / Mississippi / Cumberland (Upper and Lower)
FFY 2006	4) Tradewater / Green
FFY 2007	5) Big Sandy / Little Sandy / Tygarts

To learn more about the Kentucky Watershed Approach Framework, River Basin activities, and watersheds slated for action plan implementation go to http://kywatersheds.org

5. The project includes appropriate and effective measure(s) of project success.

"Project evaluation is as critical as your project's goals and objectives. Formulation of your project evaluation begins when the project begins; it is an essential part of the planning process. Without an evaluation system in place, it is likely that you will waste precious time and funding. It is assumed by many that evaluations are expensive and require extensive expertise. Sometimes this is true, but there are easier and less expensive approaches that can be used (though it's important to understand the tradeoffs between using a less complicated evaluation method); it is then easier to make a decision and justify your choices" (Davenport 1998).

The article referenced above, "Examining the Need for Project Evaluation" by Thomas E. Davenport, United States Environmental Protection Agency - Region 5, presents the role of evaluation, describes the four types of evaluation and provides examples.

For watershed demonstration projects, water quality monitoring is a required project measure of success.

6. The project will result in continued NPS pollution control.

A goal of Section 319 is to "institutionalize" or create permanent nonpoint source pollution control programs at the state and local levels. Section 319(h) funds should be regarded as "seed money" to initiate nonpoint source pollution control efforts, but not fund them indefinitely. A competitive project application will identify actual or potential possibilities for institutionalizing the project and will devise strategies to make that happen. Partnerships with agencies and other entities in the project area can be particularly valuable for achieving this goal.

7. The project involves appropriate government entities, educational institutions, private sector organizations and citizen groups.

Project partners can include industry and environmental groups, watershed interest groups, local citizens and community groups. An effective nonpoint source project should also be based on partnerships with federal, state and local agencies; universities; or private organizations with the appropriate expertise, experience and resources. Involve proposed partners in project development as much as possible, as they will often have helpful expertise and experience with Section 319(h)-funded projects.

Concerns and actions from local citizens are also the basis of a good project. To

promote multi-agency and citizen involvement, a project oversight committee with representation from all cooperating agencies should direct the project, review and approve progress.

8. The project budget is cost effective. Funds are targeted to provide maximum nonpoint source pollution control.

The more efficient a project is in utilizing its funding to achieve its objectives, the more resources will be made available for the many projects that are needed to control nonpoint source pollution throughout the Commonwealth. Projects should focus on usefulness and necessity and should convey a distinct intention to implement the best possible project in the most cost-effective way. For example, minimizing administrative, overhead, indirect costs and equipment purchases allows more funds to be used for pollution reduction.

9. The project uses appropriate education, training or outreach methods to reach its target audience that are intensive and adequately sustained during the project.

Educational activities targeted toward those who are responsible for the nonpoint source pollution problem are an essential part of most projects. Projects should raise the level of public awareness about how NPS pollution affects water quality and about the practical, feasible and often simple and cost-effective BMPs that are available to control it.

Education programs should be developed to encourage behavior change. When developing education programs for schools, it is important to make sure that your desired program conforms with the Kentucky Education Reform Act of 1990, Core Content and Program of Studies. By providing teachers with information that is easily incorporated into their classes, they will be more likely to use the information. When doing an education program for a school, always ask the teacher what the students are studying at that time and adjust your presentation to complement the current topic of study.

10. The project activities can be achieved within the specified time period.

Projects must set realistic implementation schedules. "Buffer" time should be included to account for possible delays. Detailed milestones will help identify the amount of time needed to implement project activities.

11. The project applicant followed instructions contained in this manual for developing and submitting an application.

These instructions are dictated by our program needs. Following instructions will help to expedite obtaining the funding from EPA.

PROJECT APPLICATION INSTRUCTIONS

*Please read the **entire** Guidance Document before beginning the process of filling out the Project Application*

The project application is to provide all the details, products and outcomes of the project. Since all of Kentucky's Section 319(h)-related documents are subject to review by EPA at any time and rarely does EPA see anything other than these documents, their quality is an indicator to EPA of the caliber of work being conducted in Kentucky. Additionally, the application is a good indicator of the quality of reports and other deliverables we can expect from the project. Two important reasons for submitting a complete and correct application are:

a. The application will be used in the ranking process to determine which projects receive funding, and

b. The application will be used as the basis for developing the legal contract.

Because the application will be the basis of the legal contract (Memorandum of Agreement [MOA] or Grant Agreement [GA]), it should be written not as a proposal but as a project that will be carried out. For example, use "will" instead of "would," and do not use "proposal" or "propose." This will reduce rewriting when developing the contract.

Contact nonpoint source program staff to discuss project ideas, particularly if there are any doubts about eligibility or if any of the information in this manual is unclear.

A separate application must be submitted for each project for which you are seeking funding. Because "combination projects" cannot be evaluated and ranked effectively, they will not be accepted. Please contact the NPS Section if you are unsure whether you are developing a "combination project" or not. The following instructions are numbered to correspond with the numbered items on the project application form.

All information presented as "fact" must be followed by a literature citation.

Please use no less than 10-point font when filling out the application. You are restricted to the space provided on the application unless specified otherwise in these instructions.

Section 1 – Project Title

The project title should uniquely identify and describe the project. Choose a title that can be used consistently for the duration of the project. We will use the same title when publicizing the project, so choose a title that project area residents would be able to recognize if the news media were to provide coverage. The title should be no longer than one typewritten line in length. Also, avoid the use of overly technical language or acronyms that would be difficult for the general public to understand.

Section 2 – Lead Agency And Primary Contact Information

Identify the "lead agency," which is the single entity (institution, organization, etc.) that will be responsible for managing the project. The lead agency will be responsible for ensuring that all project activities are

carried out and for entering into a legal contract (MOA or GA). Also identify the "primary contact" who is the head of the lead agency and will be included in major project communications. Provide the address, telephone number, fax number and email address of the lead agency.

Section 3 – Project Manager

Identify the project manager who will handle all routine correspondence and communications with Nonpoint Source Program staff. The project manager will generally be responsible for day-to-day project activities and will act as the single-point-of-contact to the Nonpoint Source Program staff. Provide the address, telephone number, fax number and email address of the project manager.

Section 4 – Project Start Date

Estimate a project start date. The date listed here is only a tentative date. The actual start date is determined when the grant is awarded from EPA and a legal contract has been executed between the lead agency and the Natural Resources and Environmental Protection Cabinet. Projects should not anticipate starting until January of 2004.

Section 5 – Project End Date

Estimate a tentative project end date. The actual end date is determined when the grant is awarded from EPA and a legal contract has been executed between the lead agency and the Natural Resources and Environmental Protection Cabinet. Projects may extend for no more than 6 ½ years.

Section 6 – Fiscal Summary

Provide a summary of the Section 319(h) funds and non-federal match needed to perform the project. Calculate the Section 319(h) funds and the non-federal match as a percent of the total project budget; carry these percentages to two decimal places. Please remember that a minimum of 40 percent non-federal match must be provided for the application to be considered for funding.

Section 7 – What Type of Project

Select the type of project you are applying for. If it is not one of the three listed examples then select "other" and describe the type of project it will be.

BMP Technology Demonstration: A BMP installed as a technology demonstration must educate citizens, officials, agency representatives and others about the NPS pollution problem and the BMP technology. Site-specific demonstrations are usually focused on hard-to-sell BMPs (e.g., riparian areas), innovative BMPs and holistic (whole farm, etc.) BMP efforts. The demonstration (or technology transfer) component can be achieved through field days, tours, brochures, newspaper articles, television, radio, etc.

Watershed Demonstration: Watershed demonstration projects involve the installation of numerous BMPs for the purpose of reducing NPS pollution and improving water quality. Environmental data collection is required in all watershed demonstration projects as a measure of project success. Because of difficulties that are encountered with documenting improvements in water quality as a result of BMP implementation, smaller, sub-watersheds should be targeted for watershed demonstrations.

Education/Technology Transfer: Education/technology transfer projects seek to modify behavior by raising awareness and providing technical training on NPS issues. Education projects can be directed toward adult or K-12 audiences or as outreach to non-formal audiences. Technology transfer

projects deliver technical information (materials, workshops, training, etc.) to audiences that will implement appropriate BMPs. Projects should contain elements that will encourage behavior change.

Section 8 – River Basin

Select the river basins that will be affected by the project or "statewide" for statewide projects.

Section 9 – Geographic Coverage

Select the geographic coverage that best fits the project area. Select "Watershed" if the project area is defined by a watershed boundary. Select "Regional" if the project is composed of areas with a common condition (e.g., karst areas). Select "Statewide" if the project is to benefit the entire state (e.g., six workshops held throughout the state and drawing from a statewide audience is a statewide geographic coverage).

Section 10 – NPS Pollutant(s) to be addressed

Check all of the NPS pollutants that will be addressed by the project. Write in any other pollutants the project will be addressing that are not included on the checklist.

Section 11 – NPS Pollution Source(s) to be addressed

Check all nonpoint source categories that will be addressed by the project. Write in any other sources the project will be addressing that are not included on the checklist. See page 2 for a list of nonpoint source categories.

Section 12 – Project Area

Select all that apply. Refer to Criteria 2 of the 11 criteria for successful projects for additional guidance regarding NPS Priority Watersheds.

Section 13 – Location

Provide sufficient information to accurately describe the project area. If the project area is the "upper portion of the East Fork of the Kentucky River watershed above the Highway 1234 bridge," for example, do not simply write "Kentucky River."

If your project includes site-specific components, such as BMPs or monitoring sites, a map must be included. The map must delineate the watershed and identify the locations of BMPs and monitoring sites or the specific area in which they will be placed. If the sites have already been selected, mark their exact locations on the map. If the precise sites are not yet known, encircle the smallest possible area within which they will be placed. You may submit a GIS-generated map or clearly mark the location(s) on a clean photocopy of a portion of a USGS 7.5-minute topographic quadrangle map. If a photocopy is used, display the name of the quadrangle clearly on the map itself, either front or back. Enclose the map as a stand-alone document. Do not refer to it in the text of your plan of work (Section 17), as this map is for internal use only and will not be transferred to EPA.

Along with a physical location description, designate which watershed(s), Hydrologic Unit Code(s) (HUC)[s], County(s), and U.S.G.S. 7.5-minute topographic quadrangle maps will be affected by the project. A HUC is a 6- to 14-digit code assigned to a particular drainage area. For statewide projects, do not include HUCs. Regional projects should include at least an 8-digit HUC. For watershed projects, supply all 14-digit HUCs associated with your watershed area. HUCs may be obtained from your local conservation district office, Kentucky Geological Survey, U. S.

Geological Survey, Kentucky Division of Water, U.S. Army Corps of Engineers or http://www.uky.edu/kgs/gis/hydro.html (requires geographical information systems [GIS] software).

Section 14 – Project Summary

The Project Summary section is a brief description (abstract) of the project. The project summary is to be prepared in narrative format, not as a list. Address the following: problem, goal, objectives, activities and measures of success. Address each of these topics using one or two sentences for each. Since the summary will be included in a national database maintained by the EPA, it needs to be clear and concise.

Section 15 – Introduction/Background

The Introduction/Background explains and justifies why the project is important in controlling nonpoint source pollution.

This section provides background information for the project. Identify the problem, source of the problem, extent of the problem and include a summary of data that documents the problem. The Introduction/Background is the place to "sell" the importance of the project to the reviewers.

Section 16 – NPS Pollution Control Project Goal, Objectives, and Activities

Identify the overall goal of the project and list the project objectives. The objectives describe what the project will accomplish by conducting an activity or by developing a product. For example, the goal of eliminating straight pipes might have an objective of raising awareness of straight pipe impacts on water quality. This objective might be achieved by activities such as installing two innovative wastewater treatment systems, conducting four field days and developing one program to educate the participants on how water quality is affected by straight pipes. All project activities, outputs and deliverables **must** be listed and quantified in this section. Use an outline format to describe each activity/product that will be achieved for each objective under the Project Goal. You may add up to one additional page as necessary to complete this Section.

Section 17 – Describe the NPS Pollution Control Plan of Work

The Plan of Work describes, in narrative format, how specific activities will be conducted. Explain how all project activities and deliverables will be accomplished.

The Plan of Work should enable the reader to have an understanding of the type of project that will be implemented and what will be accomplished by the project. Discuss all pertinent activities that will be a part of the project, including education and public awareness, technical assistance, training and BMP implementation. Include a narrative discussion of how the project activities and/or tangible products will be produced by the project.

As you prepare the project Plan of Work, understand and be familiar with the 11 criteria for successful projects on which the project will be evaluated and with grant application conditions.

If the project includes educational and technology transfer activities, discuss in detail the types of materials to be produced. Identify the target audience(s), message objective and the most effective tools. Please consider radio or TV as an additional tool to get your message out. Ensure that the products identified are the best tools to meet the objective and that existing NPS materials are used (or modified) whenever possible. Contact NPS program staff for additional

information on how to access existing materials.

Provide specifics regarding BMP demonstrations (presentations, field days, etc.). Describe how the demonstrations will be conducted. The demonstrations must transfer information about the BMPs (cost, pollution control effectiveness, installation requirements, maintenance requirements, other funding sources, etc.) to others. The goal is to persuade people to implement BMPs on their own (or with other funding sources). Identify the target audience and tailor the demonstrations to the audience in order to maximize the number of individuals affected by the demonstrations.

To ensure that the BMP demonstrations are as effective as possible, describe the advertising or invitation process (describe who will be invited and how the demonstrations will be advertised). Include a means of giving the NPS Program staff advance notice of the scheduling of any workshops, demonstrations, field days, etc., in order for us to help provide the opportunity for technology transfer.

If project activities stream restoration or bank stabilization, a comprehensive assessment of the geomorphic instability, which includes a description of the watershed, and an assessment of stream reach (tributary) conditions must be included. Describe the potential cause and extent of the geomorphic disturbance(s) (while we are not looking for a full geomorphic characterization of all upstream tributaries, we need a description of all upstream disturbances that may impact the area addressed [i.e., upstream channelization, denuded riparian areas, etc.]).

Water quality monitoring, public involvement, and project partners are all critical aspects of a plan of work. However, because of their importance, separate sections on the application are devoted to these aspects. Detailed descriptions for these aspects are provided in Sections 18, 19 and 20.

You may add up to one additional page as necessary to complete this section.

Section 18 – Describe the Water Quality Monitoring Plan

A detailed stand-alone Quality Assurance Project Plan (QAPP) is required for all projects that involve water quality monitoring as a measure of project success. Because the Kentucky Division of Water has primacy for reviewing and approving the QAPPs, they are not forwarded to EPA. Project applications, however, are sent to EPA for review and approval. Therefore, it is critical to provide a description of the project's water quality monitoring plan.

Section 19 – Public Involvement

Describe the level and extent of public involvement in implementing the project. While projects usually include pertinent agency partners, actual public involvement is often lacking. Recruiting and involving local citizens in pollution control initiatives is critical to the overall success of the project. Local citizen involvement could include an existing water interest group, people who live in or near the project area or teachers and their classes. Explain the role that citizens, landowners, stakeholders and/or the public will have in the project.

Section 20 – Project Partners

Identify all the partners that will be involved in the project and discuss their roles and responsibilities. Each project partner must have specific responsibilities identified in this section. Partners should be identified by agency/organization and position title. Avoid vague responsibilities such as "will be

involved in the project" or "will assist with the project." Additional pages may be used as needed.

Section 21 – Project Measures of Success

One of the most important and difficult aspects of a project is the development of appropriate measures of success. This is required for all Section 319(h)-funded initiatives. Congress, EPA and the state are insistent on reasonable and meaningful ways to measure project success.

Each objective listed in Section 16 should have at least one quantifiable item or tangible product to measure the success of the activity/product designed to accomplish the objective.

The most appropriate choice for project success indicators depends upon the type of project planned. For watershed demonstration projects that include BMP implementation, the measure of success is reducing the nonpoint source pollutant load or improving water quality. In order to gauge effectiveness and success, water quality monitoring must be implemented for watershed projects that include BMP implementation.

For nonpoint source education activities, an appropriate measure of success might be a participant survey to determine changes in attitudes, BMPs and awareness of the nonpoint source problems.

The following are some possible measures of success for nonpoint source pollution control projects:

- Use of photographs and videos to document improvements.
- Measurable improvement in relevant chemical, physical or biological water quality parameters.
- Number of site-specific plans implemented for erosion and sediment control, nutrient management, pest management, etc.
- Percentage of "needed" BMPs implemented in watersheds of impaired/threatened waters.
- Statistically based survey of BMP implementation rates.
- Statistically based survey of public awareness, knowledge and actions to measure changes in attitudes and behavior over time.
- Number of field days and attendees at field days, accompanied by a pre- and post-test designed to measure the changes in attitudes.
- Number of presentations to targeted audiences.
- Completion of videos or other media productions (identify the topic, number distributed, and to whom).

In describing how you will measure the project's success, keep in mind the 11 Criteria for a Successful Nonpoint Source Project.

Please complete this section in list format with at least one measure of success addressing each of the objectives listed in Section 16.

Section 22 – Milestone Schedule

The milestone schedule component explains the "when" aspect of the project. Think of the milestone dates as an estimated timeline for the life of the project. Milestones include all project activities, including interim steps, needed to implement the project. The more detailed your milestone schedule, the more helpful it will be in implementing and tracking project progress. Milestones should also include the outputs (tangible or

quantifiable items) that will be produced as part of the project and the steps needed to produce them. The number of milestones will vary considerably depending upon the type of project, the length of the project and the number of activities.

The application must include a schedule of milestones and their expected beginning and completion dates. Milestones must be listed in chronological order according to the expected beginning date. Projects should plan to begin activities no earlier than January 2004.

The following milestones must be included in all applications:

- Submit Annual Reports before August of each year and/or participate in the Kentucky NPS Conference.
- Submit three copies of the Final Report and submit three copies of all products produced by this project.
- If the project produces any educational, training, outreach or technology transfer materials, add "S*ubmit draft* (insert generic name of material [e.g., video, pamphlets, workshop agenda] here) *to NPS Program staff for approval*" as a milestone for each product.

If also applicable, the following milestones must be included:

- Develop and submit a QAPP for NPS program staff approval.
- Develop and submit a BMP Implementation Plan for NPS program staff approval.
- Submit advanced written notice to NPS Program staff for all educational public meetings, field days, workshops, etc.
- Conduct meetings, field days, workshops, etc.

The milestone dates are only projected dates; the actual starting dates for activities cannot be finalized until after the Section 319(h) grant is awarded and the contract is executed. Keep in mind that these dates might change and should not be considered final.

Please complete this section in list (i.e., 1, 2, 3, etc.) format with each milestone having associated approximate beginning and ending dates. Additional pages may be used as needed.

NOTE: NO project activities can begin before the grant is awarded, all grant conditions are met and the legal contract (MOA or GA) is executed.

Section 23 – Reference/Literature Cited

List supporting citations (references) for statements of fact included in the application. For example, provide references for statements such as "Tourism is a major economic resource…" "…identifies Big Lake as an NPS-impacted lake with threats…" (Smith 2004) or "…complaints of sewage discharges…." (Smith 2004). Because projects are evaluated and ranked by outside reviewers, it is important for the reviewers to know the source and accuracy of this information. See the reference section of this document for an example of citation format.

Section 24 – Budget Summary

The Budget Summary describes the expenses for each of the budget categories as related to their subcategories. Use total dollar amounts, i.e., 319(h) funds and non-federal match funds, to develop the Budget Summary.

All budgetary items must be included in, or tied to, project activities described in the plan of work (e.g., don't request funds for "field equipment" if you have not described activities that will use this type of equipment).

Use the categories and required format that are contained within the application when developing the Budget Summary.

Refer to the following categorical descriptions for guidance:

BMP Implementation: Include actual costs associated with installing or implementing BMPs. Do not include costs associated with planning BMPs, providing BMP technical assistance, advertising or other activities not directly relating to putting the BMP "on-the-ground."

Project Management: Include costs associated with providing administrative, fiscal and technical oversight on project implementation. Include costs associated with all required invoicing and reporting. Be sure to budget for Project Final Report preparation.

Education, Training or Outreach: Include all costs associated with public education/outreach, technical training or other types of technology exchange programs.

Monitoring: Include all costs associated with water quality monitoring. Do not include costs associated with volunteer monitoring efforts used for educational purposes.

Technical Assistance: Include all costs associated with providing technical water quality and BMP assistance to landowners and agencies.

Other: Use this category for costs that do not fall under the other categories. List the title of "other" costs on Budget Summary table.

Section 25 – Detailed Budget

The Detailed Budget represents the "how much" aspect of the project. Use the categories and required format contained within the application when developing the Detailed Budget. The amounts in the "Total" column for the Detailed Budget must be the same as the "Total" column in the Budget Summary.

Maximum federal reimbursement for a nonpoint source pollution control project is 60 percent of the total project cost. Therefore, each project must provide non-federal matching funds for a minimum 40 percent of the total project cost.

Section 26 – Budget Narrative

The budget narrative must justify and clarify **all** project expenses and provide supporting information that ties budget items to project activities and clarifies the breakdown and source of the non-federal match funds. Do not include information in this section that is already stated elsewhere (e.g., refer to the appropriate project activities in the Plan of Work; do not rewrite them). You may add up to one additional page as necessary to complete this Section. Refer to the following categorical descriptions for guidance on the level of information needed:

Personnel - List the position titles of project staff (including volunteers) and the number of staff years and hours (or percentage of time) to be contributed. Include the time period (e.g., 0.5 PY over 3 years). If the personnel dollars that are budgeted are strictly salaries, then add a statement that no fringe is being charged to the project. However, if fringe is calculated within the personnel dollars, then the fringe percentage rate and amount need to be discussed in the narrative. Do not include indirect/overhead costs in this category. Discuss

indirect/overhead charges in the Operating Costs category. Do not use names of individuals since these may change over the life of the project.

Supplies - Identify only those supplies under $500 that are significant in achieving the objectives of the project (e.g., monitoring supplies, educational supplies, etc.). Incidental supplies (e.g., pens, stamps, envelopes, etc.) should be included under the "Operating Costs" category.

Equipment - Identify any equipment with a value of $500 or more to be purchased, leased, donated, etc., under this category. List each piece of equipment and its cost separately.

If purchasing is more expensive but necessary, you should provide an explanation in the budget narrative. Include a cost analysis that shows the comparison used for the choice.

Contractual - List all entities that will be hired to perform an activity or service related to the project and describe those activities or services.

Travel - All travel must result in nonpoint source pollution control benefits to the state of Kentucky. Explain all necessary travel, including who will need to travel (titles), the purpose, how far and all expenses included under this category (e.g., fuel, per diem, etc.). Typically, out-of-state travel cannot be supported with Section 319(h) funds. Contact NPS Program staff for clarification on specific out-of-state travel requests. Travel expenses are often included in an agency or organization's overhead/indirect rate. Be sure requested funds don't "double-dip"!

Operating Costs - List all indirect/overhead items, e.g., building space costs, utility costs, incidental supplies, travel or any other indirect costs necessary for implementing the project. Include the indirect/overhead percentage rate.

Other - Provide details for other budget categories that do not fall into any of the suggested categories. Add any additional categories specific and necessary to the project.

Section 27 – Grant Application Conditions

Applicants must read and agree to comply with all applicable conditions listed in this section. Failure to read, complete and sign this section will result in the project being removed from further funding consideration. Be sure to read and thoroughly understand these conditions. Contact NPS Program staff if you need additional guidance or clarification on any of these conditions.

Education Materials Condition

If your project includes school-based educational components, make sure your desired program conforms to the Kentucky Education Reform Act of 1990, Core Content and Program of Studies.

All materials printed for your education and outreach program must conform to the North American Association for Environmental Education's (NAAEE) *Guidelines for Excellence in Environmental Education* and their *Guidelines for EE Materials K-12* (NAAEE 1998, 1999) (www.NAAEE.org).

Material Review Condition

All existing materials and drafts of all printed materials (e.g., public meeting, agendas, training materials, manuals, pamphlets, newsletters, news articles, etc.), video scripts and other products must be submitted to NPS Program staff for review and approval prior to final product development. Review and approval of new, as well as existing, materials ensures that the most appropriate and up-to-date educational materials are being used.

In addition, review and approval is required in order to ensure consistency with the (1) Clean Water Act Section 319 goals and objectives, (2) Kentucky Nonpoint Source Management Program, (3) US Environmental Protection Agency approved project workplan or application and (4) other required project documents (i.e. Quality Assurance Program Plan, BMP Implementation Plan, etc.).

Quality Assurance Project Plan (QAPP) Condition

If the project includes the collection of environmental data (water quality monitoring is an example), then a Quality Assurance Project Plan (QAPP) is required. Projects that require QAPPs include, but are not limited to, assessment monitoring and watershed projects. The QAPP must be prepared as a stand-alone document and submitted with the project application. All monitoring activities conducted as a part of a project must be consistent with the approved QAPP, and monitoring activities cannot occur until the Division of Water has reviewed and approved the QAPP.

BMP Implementation Plan Condition

If the project includes BMP implementation, a BMP Implementation Plan must be submitted to the NPS program staff for review and approval. Do not submit the BMP Implementation Plan with the application. However, the plan must be submitted and approved before the expenditure of any BMP funds.

The BMP Implementation Plan will include:

1. A list of BMP technologies to be installed.
2. A description of the technology selection process, the estimated cost, relative treatment efficiency and the minimum operation and maintenance required for the BMP to operate efficiently.
3. A description of how BMPs will be targeted to specific locations and, if locations are known, a map(s) clearly showing the locations where the BMP technologies will be demonstrated.
4. A means of notifying the Division of Water, NPS Section prior to BMP implementation.
5. A financial plan of action that describes how financial assistance will be provided for technology demonstration.
6. The type of maintenance agreement to be made with the landowner.
7. A statement that ensures that all agricultural or forestry BMPs will be consistent with the Kentucky Agriculture Water Quality Act and/or the Forest Conservation Act.

No BMP implementation activities shall occur until the Division of Water has approved the BMP Implementation Plan.

Animal Feeding Operation (AFO) Condition

Any Animal Feeding Operation (AFO) that receives financial assistance via this project will implement a nutrient management plan that:

1. Provides and maintains buffers or equivalent practices.
2. Diverts clean water away from animal manure storage structures and CAFO yards.
3. Prevents direct contact of confined animals with waters of the Commonwealth.
4. Addresses animal mortality disposal.
5. Addresses chemical disposal.
6. Addresses manure testing.

7. Addresses record keeping and testing.
8. Addresses proper storage capacity and maintenance of animal waste-storage structures/facilities.
9. Addresses rates and timing of land application of manure and wastewater.

An AFO is defined as any lot or facility where animals are stabled or confined and fed or maintained for a total of 45 days out of the 12-month period and where crops, vegetation, forage growth or post-harvest residues are not sustained over any portion of the lot or facility over the growing season.

Stream Restoration/Bank Stabilization Condition

If project activities include stream restoration or bank stabilization, the BMP Implementation Plan must include a restoration design that specifies or documents the procedure that will be used to develop the restoration design, describes the extent of the design, relates the restored area to the extent of disturbance, identifies how transitions upstream and downstream from the restoration area will be planned and describes any channel changes and changes in flooding potential.

The BMP Implementation Plan must also include a post-restoration assessment that evaluates the success (stability, duration, etc.) of the restoration techniques. The post-restoration assessment should provide a means for periodic and long-term evaluation of the restoration sites.

For some projects, the project Measures of Success and QAPP may address some of or the entire post-restoration assessment requirement.

GIS Condition

Projects that include Geographic Information System (GIS) activities must agree to the following condition:

All geospatial data created will be consistent with Federal Geographic Data Committee (FGDC) endorsed standards.

Information on federal endorsed standards can be obtained from the web site www.fgdc.gov under the topics of "standards" and "Standard Documents by Sponsoring Agencies."

Project Partners Condition

Projects that include federal agencies or 501(c)(4) organizations as project partners must agree to the following condition:

> No 501(c)(4) organization may receive 319(h) funds and no federal agency or 501(c)(4) organization may provide non-federal match funds for 319(h) projects.

REQUIREMENTS FOR COMPLETING QUALITY ASSURANCE PROJECT PLANS (QAPPS)

In accordance with the Kentucky Department for Environmental Protection's *Quality Assurance Management Plan* (QAMP) (signed and approved by the U.S. Environmental Protection Agency), individual Quality Assurance Project Plans (QAPP) are required for all projects that involve the collection of environmental data (KDEP 2000). In previous years these plans were referred to as Quality Assurance/ Quality Control (QA/QC) Plans.

QAPPs are required to "ensure that all environmental data directly generated by its programs or through grants administered by the Department for Environmental Protection is known, discernable, and verifiable" (KDEP 2000). The QAPP describes how quality assurance (QA) and quality control (QC) are applied to data collections (USEPA 2001a).

Quality control (QC) refers to the routine procedures followed in the field and in the laboratory to produce data of predetermined standards. Quality assurance (QA) refers to the integrated program, including QC activities, that allows the production of valid and reliable data (KDOW 2002c). QAPPs provide a way to help ensure maximum benefit from the effort and money expended to investigate an environmental problem. They are a means of documenting that proper planning has occurred prior to collection of samples. A list of examples of activities that may fall under the headings "QA" and "QC" are identified at the end of this chapter. The QAPP should clearly state the purpose (objective) and outline the investigative approach that will be followed.

The QAPP should be completed following the instructions outlined in *EPA Requirements for Quality Assurance Project Plans* (USEPA 2001a), which can be obtained from http://www.epa.gov/quality/qs-docs/r5-final.pdf. A photocopy of this document can also be provided upon request. In addition, the following information must also be included:

- Section 3.2.5, A5-Problem Definition/Background, a detailed description of the project area (this should include a discussion on the soils, geology, topography, watershed size and other relevant information).
- Section 3.3.1, B1-Sampling Process Design (Experimental Design), the sampling location (Lat. and Long.), stream order, county(s), USGS 7.5-minute topographic map(s), milepoint(s) that will be covered by the project and a map.

Any "borrowed" information must be fully documented in the QAPP and a full citation must be included in a Reference Section. The QAPP is applicable to all types of data collection, including physical, chemical, biological and fluvial geomorphologic. All sections of your QAPP must be completed or contain an explanation of why each incomplete section is not applicable to your project.

While environmental data collection needs to be presented in the project application, the QAPP is a "stand alone" document. It is reviewed and approved separately from, and with a different perspective than, the application. Therefore, in order to expedite the review process of

both documents, certain information will be required in each document. By supplying the information in both documents, time-consuming cross-referencing is eliminated, reviews can be accomplished in a timely manner.

Recommended literature which may be helpful in preparing a QAPP include the following:

Methods for assessing the biological integrity of surface waters. (KDOW 2002c).

Monitoring guidance for determining the effectiveness of nonpoint source controls. (USEPA 1997a). Refer to Chapter 5, *Quality Assurance and Quality Control.*

Standard methods for the examination of water and wastewater. (APHA et al. 1998).

Rapid bioassessment protocols for use in wadeable streams: periphyton, benthic macroinvertebrates, and fish. (USEPA 1999).

Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: agriculture. (USEPA 1997b).

Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: forestry. (USEPA. 1997c).

Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: urban. (USEPA 2001b).

Guidance for data quality assessment: practical methods for data analysis. (USEPA 2000).

National handbook of water quality. (USDA 1996).

QA Activities

- ✓ Organization of project into component parts.
- ✓ Assignment of roles and responsibility to project staff.
- ✓ Use of statistics to determine the number of samples and sampling sites needed to obtain data of a required confidence level.
- ✓ Tracking of sample custody from field collection through final analysis.
- ✓ Audits of field and laboratory operations.
- ✓ Maintenance of accurate and complete records of all project activities.
- ✓ Personnel training to ensure consistency of sample collection techniques and equipment use.

QC Activities

- ✓ Collection of duplicate samples for analysis.
- ✓ Analysis of blank and spike samples.
- ✓ Replicate sample analysis.
- ✓ Regular inspection and calibration of analytical equipment.
- ✓ Regular inspection of reagents and water contamination.
- ✓ Regular inspection of refrigerators, ovens, etc., for proper operation.

From USEPA 1997a

QAPP Submittal

All projects that include environmental data collection must submit the QAPP along with the application for Section 319(h) funding in two ways:

1. Three print copies (double-sided, copied on recycled paper) and
2. One electronic copy (on 3.5” diskette) saved as Microsoft Word version 97 (or earlier) file.

QAPPs submitted after the deadline will result in the entire project being removed for funding consideration.

REFERENCES

(APHA). American Public Health Association, American Water Works Association, and Water Environment Federation. 1998. Standard methods for the examination of water and wastewater. 20th Edition. American Public Health Association, American Water Works Association and Water Environment Federation, Washington, D.C.

Davenport, T. E. 1998. Examining the need for project evaluation. Water Division, U. S. Environmental Protection Agency, Region 5, Chicago, Ill..

(KDEP). Kentucky Department for Environmental Protection. 2000. Quality management plan. Kentucky Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, Frankfort, Ky.

(KDOW). Kentucky Division of Water. 2000. Kentucky nonpoint source management program – 2.0 for Federal fiscal years 2000-2005. Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet, Frankfort, Ky.

KDOW. 2002a. 2002 Kentucky Report to Congress on Water Quality. Division of Water, Natural Resources and Environmental Protection Cabinet, Frankfort, Ky. Web address: http://water.nr.state.ky.us/dow/pubs/2002_305b.pdf

KDOW. 2002b. DRAFT 2002 303(d) List of Waters for Kentucky. Division of Water, Natural Resources and Environmental Protection Cabinet, Frankfort, Ky. Web link: http://water.nr.state.ky.us/dow/303(d)2002.htm

KDOW. 2002c. Methods for assessing the biological integrity of surface waters. Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet, Frankfort, Ky.

(NAAEE). North American Association for Environmental Education. 1998. Environmental education materials - guidelines for excellence. NAAEE Publications, Troy, Ohio.

NAAEE. 1999. Excellence in environmental education – guidelines for learning (K-12). NAAEE Publications, Troy, Ohio.

(USEPA). United States Environmental Protection Agency. 1997a. Monitoring guidance for determining the effectiveness of nonpoint source controls. EPA841-B-96-004. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 1997b. Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: I. Agriculture. EPA841-B-97-010. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 1997c. Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: II. Forestry. EPA841-B-97-009. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 1999. Rapid bioassessment protocols for use in wadeable steams and rivers: periphyton, benthic macroinvertebrates, and fish, 2nd Edition. EPA841-B-99-002. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 2000. Guidance for data quality assessment: practical methods for data analysis. EPA600-R-96-084. U.S. Environmental Protection Agency, Office of Environmental Information, Washington, D.C.

USEPA. 2001a. EPA requirements for quality assurance project plans. EPA240-B-01-003. U.S. Environmental Protection Agency, Office of Environmental Information, Washington, D.C.

USEPA. 2001b. Techniques for tracking, evaluating, and reporting the implementation of nonpoint source control measures: III. Urban. EPA841-B-00-007. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 2002. Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories in FY 2003. Web address: http://www.epa.gov/owow/nps/Section319/319guide03.html

(USDA). United States Department of Agriculture. 1996. National handbook of water quality monitoring. United States Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.

2003-04 Project Application

Kentucky Nonpoint Source Pollution Control Program

Use this form to apply for Section 319(h) Nonpoint Source Implementation Grant Funds.
This application Must Be **Typed** or **Word Processed** & Must Be Submitted on this Form or an Identical Copy

1. Project Title:

2A. Lead Agency & Primary Contact			**3A. Project Manager Name and Title**		
B. Street Address			**B. Street Address**		
C. City	**D. State**	**E. Zip**	**C. City**	**D. State**	**E. Zip**
F. Telephone Number			**F. Telephone Number**		
G. Fax Number			**G. Fax Number**		
H. Email Address			**H. Email Address**		
4. Project Start Date:			**5. Project End Date:**		

6. Fiscal Summary:

319(h) Funding Requested: **$**_____ _____**%**
Non-Federal Match: **$**_____ _____**%**
Total Project Budget: **$**_____ 100.00**%**

7. What type of Project:

- ☐ Watershed Demonstration
- ☐ BMP Technology Demonstration
- ☐ Education/Technology Transfer
- ☐ Other: _____

8. River Basin:

- ☐ *Statewide*
- ☐ Kentucky
- ☐ Salt
- ☐ Licking
- ☐ Tygarts
- ☐ Green
- ☐ Tradewater
- ☐ Tennessee
- ☐ Ohio tributary
- ☐ Lower Cumberland
- ☐ Upper Cumberland
- ☐ Big Sandy
- ☐ Little Sandy
- ☐ Mississippi

NPS STAFF USE:

Applications must be postmarked (or received if hand delivered) by February 14, 2003

9. Geographic Coverage:

- ☐ Statewide
- ☐ Regional
- ☐ Watershed

10. NPS Pollutant(s) to be addressed:

- ☐ Low dissolved oxygen
- ☐ Sedimentation/Siltation
- ☐ Suspended Solids
- ☐ Pathogens/Bacteria
- ☐ Organic enrichment
- ☐ Other:_____
- ☐ Pesticides
- ☐ Oil and grease
- ☐ Nutrients
- ☐ pH

11. NPS Pollution Source(s) to be addressed:

- ☐ NPS All
- ☐ Agriculture
- ☐ Construction
- ☐ Silviculture
- ☐ Urban Runoff
- ☐ Resource Extraction
- ☐ Habitat Modification
- ☐ Improper Waste Disposal (including Onsite Waste issues)
- ☐ Hydrologic Modification
- ☐ Recreation
- ☐ Other:_____

12. Project Area:

- Project deals directly with groundwater, springs, or karst? ☐ yes ☐ no
- **For Watershed Projects Only, complete the following:**
  - Project implements TMDL? ☐ yes ☐ no
  - Project addresses TMDL that is under development? ☐ yes ☐ no
  - Project is on a 303(d) 1st priority impaired stream? ☐ yes ☐ no **OR**
  - 2nd priority impaired stream? ☐ yes ☐ no
  - Project is on an Outstanding Resource Water with identified threats? ☐ yes ☐ no
  - Project is on a High Quality Water with identified threats? ☐ yes ☐ no
  - Project has other impairments or identified threats? ☐ yes, described in app. ☐ no

13. Location:

Map Attached: ☐ **Yes** ☐ **N/A**

A. Watershed(s):

B. HUC(s):

C. County(s):

D. U.S.G.S. 7.5 minute topographic quadrangle maps in project area:

Applications must be postmarked (or received if hand delivered) by February 14, 2003

14. Project Summary:

Applications must be postmarked (or received if hand delivered) by February 14, 2003

15. Introduction/Background:

16. NPS Pollution Control Project Goal, Objectives, and Activities:

17. Describe the NPS Pollution Control Plan of Work:

18. Describe the Water Quality Monitoring Plan:

19. Public Involvement:

Applications must be postmarked (or received if hand delivered) by February 14, 2003

20. Project Partners:

Agency Name: _____
Agency Address: _____
Role/Contribution to Project: _____

_____
Contact Person: _____ Phone No. _____
E-mail address: _____

Agency Name: _____
Agency Address: _____
Role/Contribution to Project: _____

_____
Contact Person: _____ Phone No. _____
E-mail address: _____

Agency Name: _____
Agency Address: _____
Role/Contribution to Project: _____

_____
Contact Person: _____ Phone No. _____
E-mail address: _____

Agency Name: _____
Agency Address: _____
Role/Contribution to Project: _____

_____
Contact Person: _____ Phone No. _____
E-mail address: _____

Agency Name: _____
Agency Address: _____
Role/Contribution to Project: _____

_____
Contact Person: _____ Phone No. _____
E-mail address: _____

21. Project Measures of Success:

22. Milestone Schedule: **Milestones**	**Expected Begin Date**	**Expected Completion Date**
1.		

23. Reference/Literature Cited:

24. Budget Summary

	BMP Implementa-tion	Project Management	Education, Training, or Outreach	Monitoring	Technical Assistance	Other –	TOTAL
Personnel	$	$	$	$	$	$	$
Supplies							
Equipment							
Travel							
Contractual							
Operating Costs							
Other							
TOTAL	$	$	$	$	$	$	$

25. Detailed Budget

Budget Categories (itemize all categories)	Section 319(h)	Non-Federal Match	TOTAL
Personnel	$	$	$
Supplies			
Equipment			
Travel			
Contractual			
Operating Costs			
Other			
TOTAL	$	$	$
	_____%	_____%	**100** %

Applications must be postmarked (or received if hand delivered) by February 14, 2003

26. Budget Narrative:

27. Grant Application Conditions

Completion of this section is required in order to receive funding consideration.

- Applicant agrees that the proposed project will comply with all applicable state laws and rules.
- Applicant agrees to obtain all applicable permits.
- Reporting will be conducted in accordance with the legal contract.
- All Project Partners have agreed to participate ☐ Yes ☐ N/A
- **I have read and agree to comply with all applicable conditions as specified in the Guidance Document.**
    - Education Materials Condition (See Section 27, Page 26) ☐ Yes ☐ N/A
    - Material Review Condition (See Section 27, Page 26) ☐ Yes ☐ N/A
    - QAPP Condition (See Section 27, Page 26) ☐ Yes ☐ N/A
    - BMP Implementation Plan Condition (See Section 27, Page 26) ☐ Yes ☐ N/A
        - AFO Condition (See Section 27, Page 27) ☐ Yes ☐ N/A
        - Geomorphic BMP Condition (See Section 27, Page 27) ☐ Yes ☐ N/A
    - GIS Condition (See Section 27, Page 27) ☐ Yes ☐ N/A
    - Project Partners Condition (See Section 27, Page 27) ☐ Yes ☐ N/A

WARNING: Any application which is determined to be deficient, not eligible, or missing KEY components will not be considered for funding.

Signature of Lead Agency's Authorized Representative Date

_____ _____

Typed Name and Title of Representative Telephone Number

_____ _____

Applications must be postmarked (or received if hand delivered) by February 14, 2003